



U.S. Department  
of Transportation  
**Pipeline and  
Hazardous Materials  
Safety Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE USA/0612/S-96, REVISION 5**

East Building, PHH-23  
1200 New Jersey Avenue Southeast  
Washington, D.C. 20590

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model Numbers X.1301 and X.1302.
2. Source Description - Both models are single encapsulations made of Armco 17-4 PH stainless steel, with stainless steel inserts. Minimum wall thickness in each case is 0.60 mm (0.02 in.). Welds are by tungsten inert gas or laser method. Approximate outer dimensions of Model X.1301 are 8.5 mm (0.33 in.) in diameter and 14.5 mm (0.57 in.) in length. Approximate outer dimensions of Model X.1302 are 7.94 mm (0.31 in.) in diameter and 10.65 mm (0.42 in.) in length. Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawings RBA63205, Rev. B and RBA61678, Rev. B for Model X.1301, and Drawings RBA63206, Rev. B and RBA61721, Rev. B for Model X.1302.
3. Radioactive Contents - No more than 130 GBq (3.5 Ci) of Cesium-137 for Model X.1301, and no more than 93 GBq (2.5 Ci) of Cesium-137 for Model X.1302. The Cesium-137 is in solid form, bonded in a borosilicate glass polymer.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on June 30, 2022.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.


**CERTIFICATE USA/0612/S-96, REVISION 5**

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the May 10, 2017 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

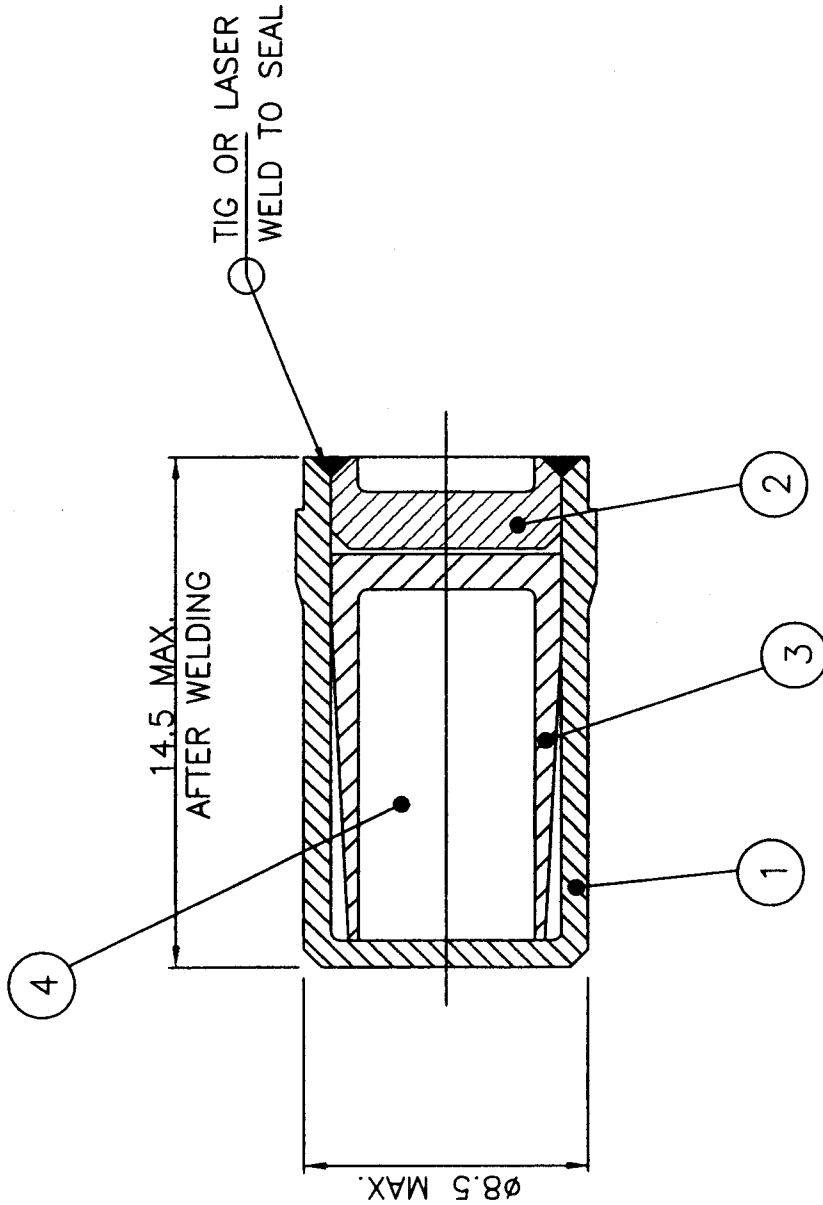



**Jun 15 2017**  
(DATE)

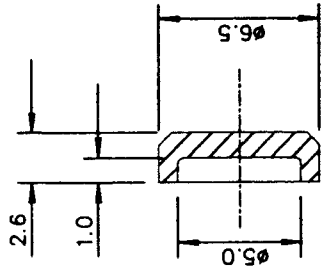
 \_\_\_\_\_  
William Schoonover  
Acting Associate Administrator for Hazardous Materials Safety

Revision 5 - Issued to extend the expiration date.

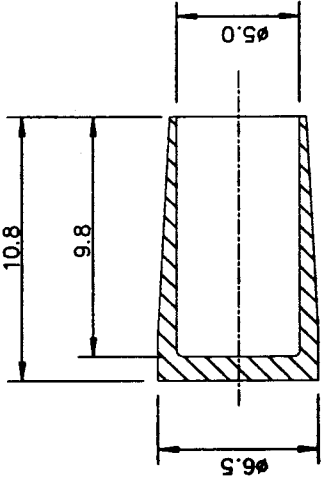
Item	Description	Material	QTY
1	BODY	STAINLESS STEEL	1
2	LID	STAINLESS STEEL	1
3	INSERT	STAINLESS STEEL	1
4	ACTIVE MATERIAL		A/R



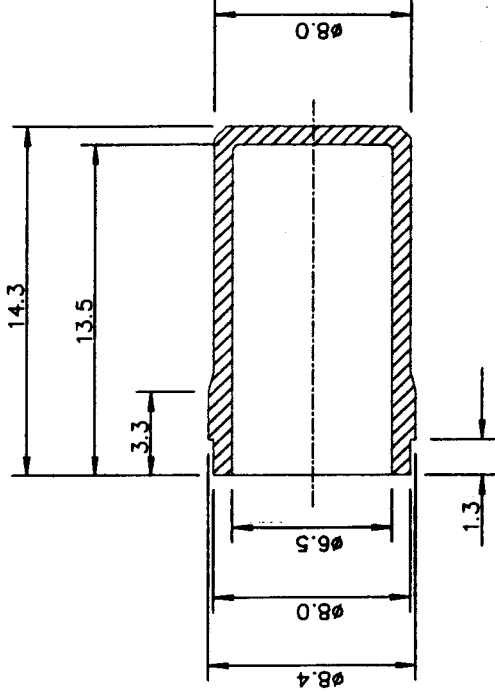
 40 NORTH AVE, BURLINGTON, MA 01903		DESCRIPTIVE DRAWING	
APPROVALS <i>[Signature]</i> 12 Feb 03 <i>[Signature]</i> 12 Feb 03		TITLE X1301 CAPSULE ASSEMBLY	
DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 X.X ±0.1 X.XX ±0.05 ANGULAR ±5°		SIZE A	REV B
ERF 443		DWG. NO. RBA63205	SCALE: N/A SHEET 1 OF 1



ITEM.1 LID



ITEM.2 INSERT



ITEM.3 BODY

- NOTES:  
 1. MATERIAL: ITEM 1 = 17-4 PH  
 ITEM 2 = 316L STAINLESS STEEL  
 ITEM 3 = 17-4 PH

APPROVALS	
<i>[Signature]</i>	12 Feb 03
<i>[Signature]</i>	12 Feb 03

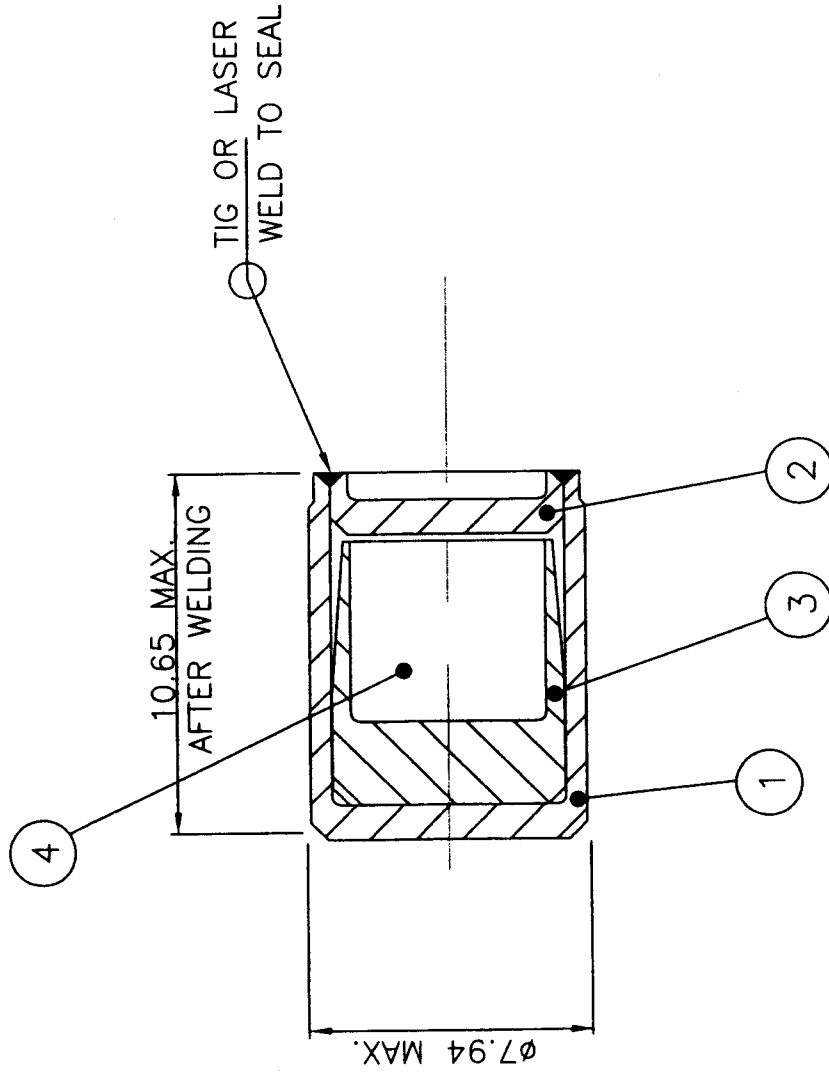
DIMENSIONS IN MILLIMETERS  
 UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	INTERNAL	NG
X.X	±0.1	INTERNAL	NG
X.XX	±0.05	EXTERNAL	NG
ANGULAR	±5°		

<b>AEATECHNOLOGY</b> USA		40 NORTH AVE. BURLINGTON, MA 01803	
<b>DESCRIPTIVE DRAWING</b>			
<b>TITLE X1301 CAPSULE DETAILS</b>			
SIZE	DWG. NO.	SCALE:	REV
A	RBA61678	N/A	B
			SHEET 1 OF 1

ERF # 443

Item	Description	Material	QTY
1	BODY	STAINLESS STEEL	1
2	LID	STAINLESS STEEL	1
3	INSERT	STAINLESS STEEL	1
4	ACTIVE MATERIAL		A/R



APPROVALS	
<i>[Signature]</i>	12 Feb 03
<i>[Signature]</i>	12 Feb 03

DIMENSIONS IN MILLIMETERS  
UNLESS OTHERWISE STATED TOLERANCES:

X ±0.5  
X.X ±0.1  
X.XX ±0.05  
ANGULAR ±5'

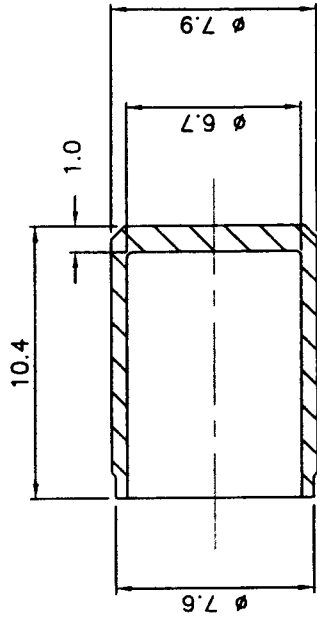
INTERNAL  $\frac{NB}{\Delta}$   
EXTERNAL  $\frac{NB}{\nabla}$

**AEATECHNOLOGY**  
QSA  
40 NORTH AVE, BURLINGTON, MA 01803

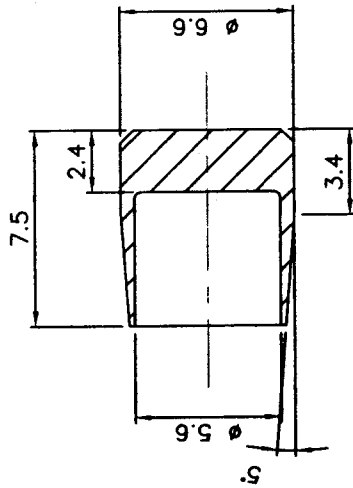
DESCRIPTIVE  
DRAWING

TITLE X1302 CAPSULE ASSEMBLY

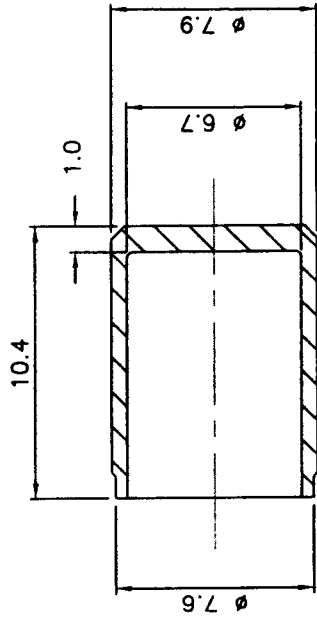
SIZE	DWG. NO.	REV
A	RBA63206	B
SCALE: N/A		SHEET 1 OF 1



ITEM.1 LID



ITEM.2 INSERT



ITEM.3 BODY

NOTES:

- 1. MATERIAL: ITEM 1 = 17-4 PH
- ITEM 2 = 316L STAINLESS STEEL
- ITEM 3 = 17-4 PH

APPROVALS	
<i>[Signature]</i>	12 Feb 03
<i>[Signature]</i>	12 Feb 03

DIMENSIONS IN MILLIMETERS  
UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	MS
XX	±0.1	INTERNAL
XXX	±0.05	EXTERNAL
	ANGULAR	±5°



DESCRIPTIVE  
DRAWING

TITLE X1302 CAPSULE DETAIL

SIZE	DWG. NO.	SHEET	OF	REV
A	RBA61721	N/A	1	B
SCALE:		SHEET 1 OF 1		

ERF 443



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1200 New Jersey Avenue SE  
Washington, D.C. 20590

**Pipeline and  
Hazardous Materials  
Safety Administration**

**CERTIFICATE NUMBER:** USA/0612/S-96, Revision 5

**ORIGINAL REGISTRANT(S):**

Ms. Lori Podolak  
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